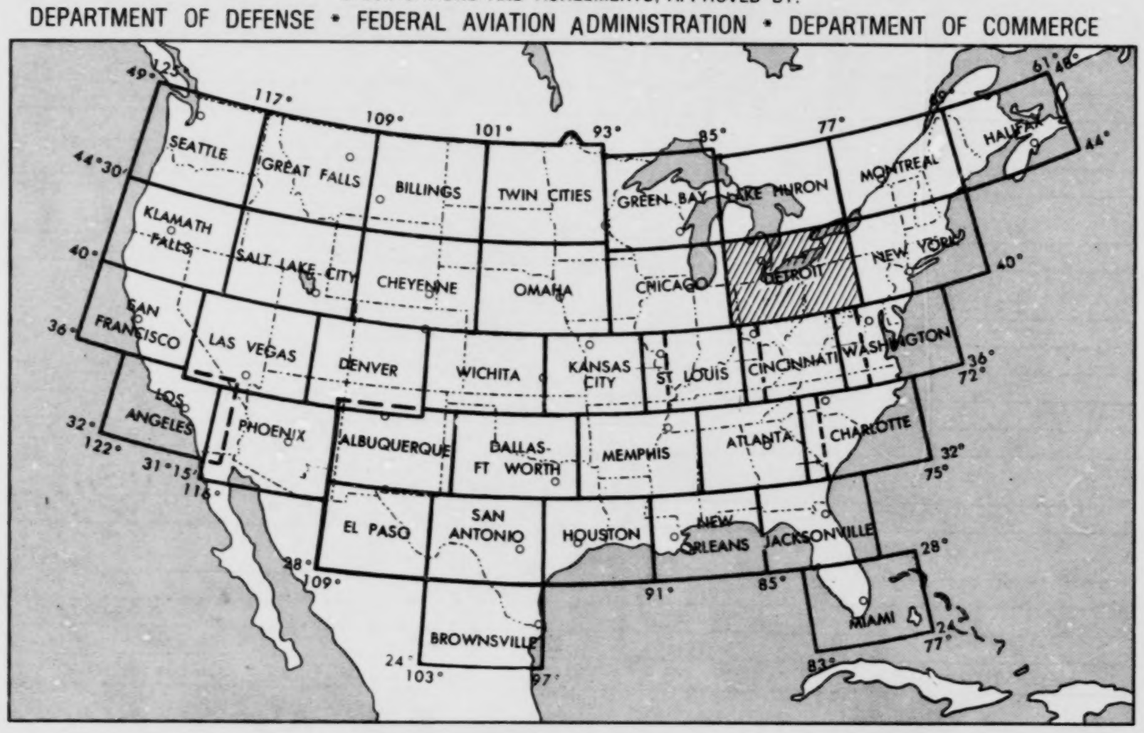
SOUTH D 48/989-2 DETROIT NORTH

SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000

Lambert Conformal Conic Projection Standard Parallels 41°20' and 46°40'
Horizontal Datum: North American Datum of 1927
Topographic data corrected to June 1989

39TH EDITION October 19, 1989
Includes airspace amendments effective *September 21, 1989*
and all other aeronautical data received by August 24, 1989
Consult appropriate NOTAMs and Flight Information
Publications for supplemental data and current information.
This chart will become *OBSOLETE FOR USE IN NAVIGATION* upon publication of
the next edition scheduled for *MAY 3, 1990*

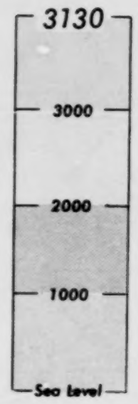
PUBLISHED IN ACCORDANCE WITH INTERAGENCY AIR CARTOGRAPHIC COMMITTEE
SPECIFICATIONS AND AGREEMENTS, APPROVED BY:
DEPARTMENT OF DEFENSE • FEDERAL AVIATION ADMINISTRATION • DEPARTMENT OF COMMERCE



CONTOUR INTERVAL 500 *feet*
Intermediate contour 250 feet
—500— —250—

HIGHEST TERRAIN elevation is *3130 feet*
located at 40°17'N – 78°33'W

Critical elevation ---------- •4254
Approximate elevation ---------- x3200
Doubtful locations are indicated by omission
of the point locator (dot or "x")



MILITARY TRAINING ROUTES (MTRs)

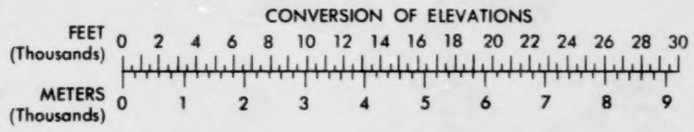
All IR and VR MTRs are shown, and may extend from the surface upwards. Only the route centerline, direction of flight along the route and the route designator are depicted - route widths and altitudes are not shown.

Since these routes are subject to change every 56 days, and the charts are reissued every 6 months, you are cautioned and advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

Routes with a change in the alignment of the charted route centerline will be indicated in the Aeronautical Chart Bulletin of the Airport/Facility Directory. Also, the VFR Wall Planning Chart is issued every 56 days and displays current route configurations and a composite tabulation of altitudes along these routes.

Military Pilots refer to Area Planning AP/1B Military Training Route North and South America for current routes.

CONVERSION OF ELEVATIONS



Published at Washington, D.C.
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

C 55.416/10: _____

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SOUTH

DETROIT
LEGEND

NORTH

AIRPORTS

AIRPORT DATA

ADDITIONAL AIRPORT INFORMATION

RADIO AIDS TO NAVIGATION AND COMMUNICATION BOXES

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

TOPOGRAPHIC INFORMATION

OBSTRUCTIONS

MISCELLANEOUS

SOUTH D 48/98-2 DETROIT NORTH

SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000

Lambert Conformal Conic Projection Standard Parallels 41°20' and 45°40'
Horizontal Datum: North American Datum of 1927
Topographic data corrected to June 1989

39 EDITION October 12, 1989

DEPARTMENT OF DEFENSE • FEDERAL AVIATION ADMINISTRATION • DEPARTMENT OF TRANSPORTATION

CONTOUR INTERVAL 500 feet
Intermediate contour 250 feet

HIGHEST TERRAIN elevation is 3130 feet located at 40° 17' N - 78° 33' W

Critical elevation ..... ▲4254

Approximate elevation ..... ▲4200

Doubtful locations are indicated by omission of the point locator (dot or "x").

MILITARY TRAINING ROUTES (MTR)

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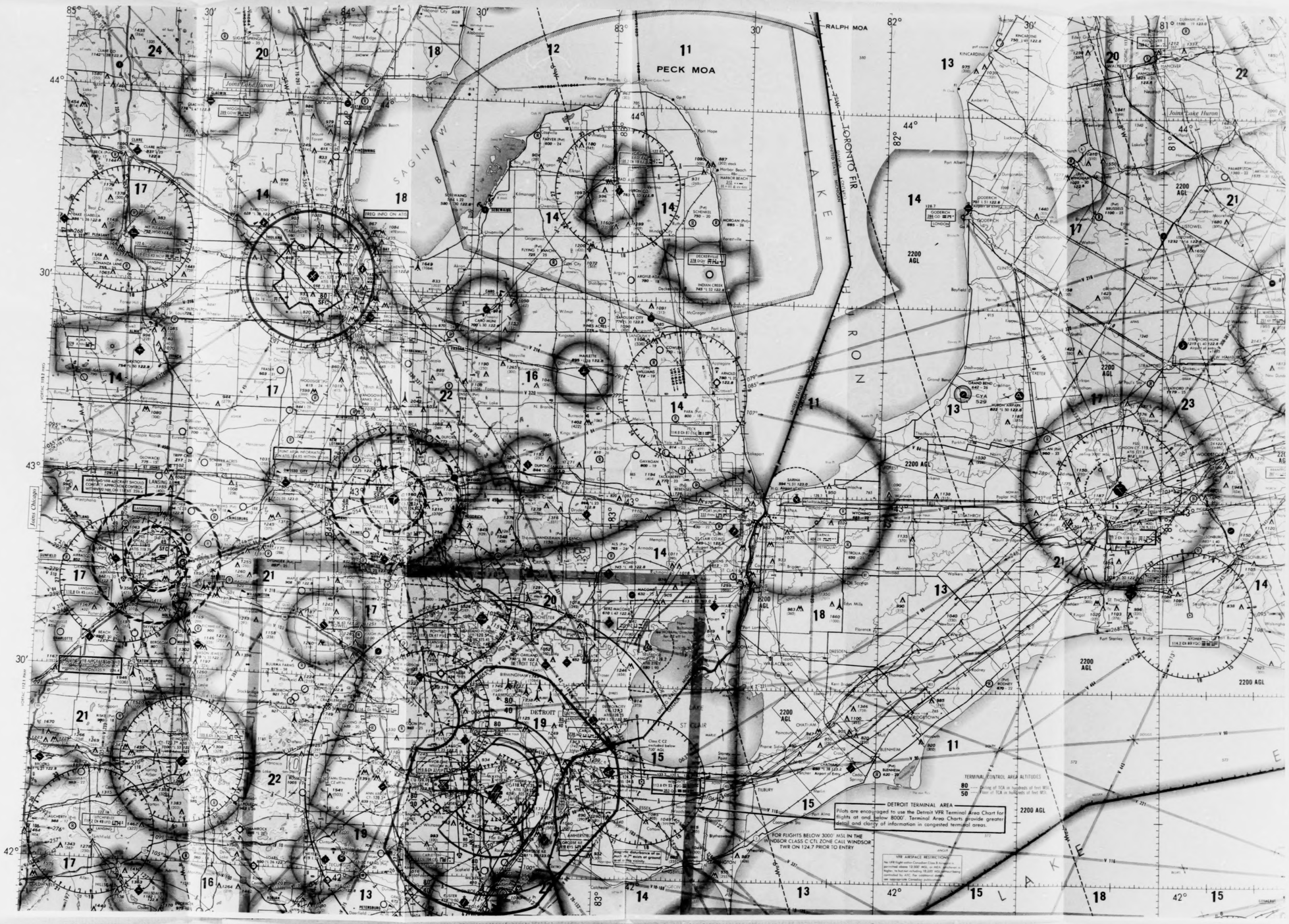
PECK MOA
RALPH MOA
TORONTO FIR
LAKE HURON
SAGINAW BAY
Joint Lake Huron
DETROIT TERMINAL AREA
Pilots are encouraged to use the Detroit VFR Terminal Area Chart for flights at and below 8000'. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.
FOR FLIGHTS BELOW 3000' MSL IN THE WINDSOR CLASS C CTL ZONE CALL WINDSOR TWR ON 124.7 PRIOR TO ENTRY
TERMINAL CONTROL AREA ALTITUDES
2200 AGL

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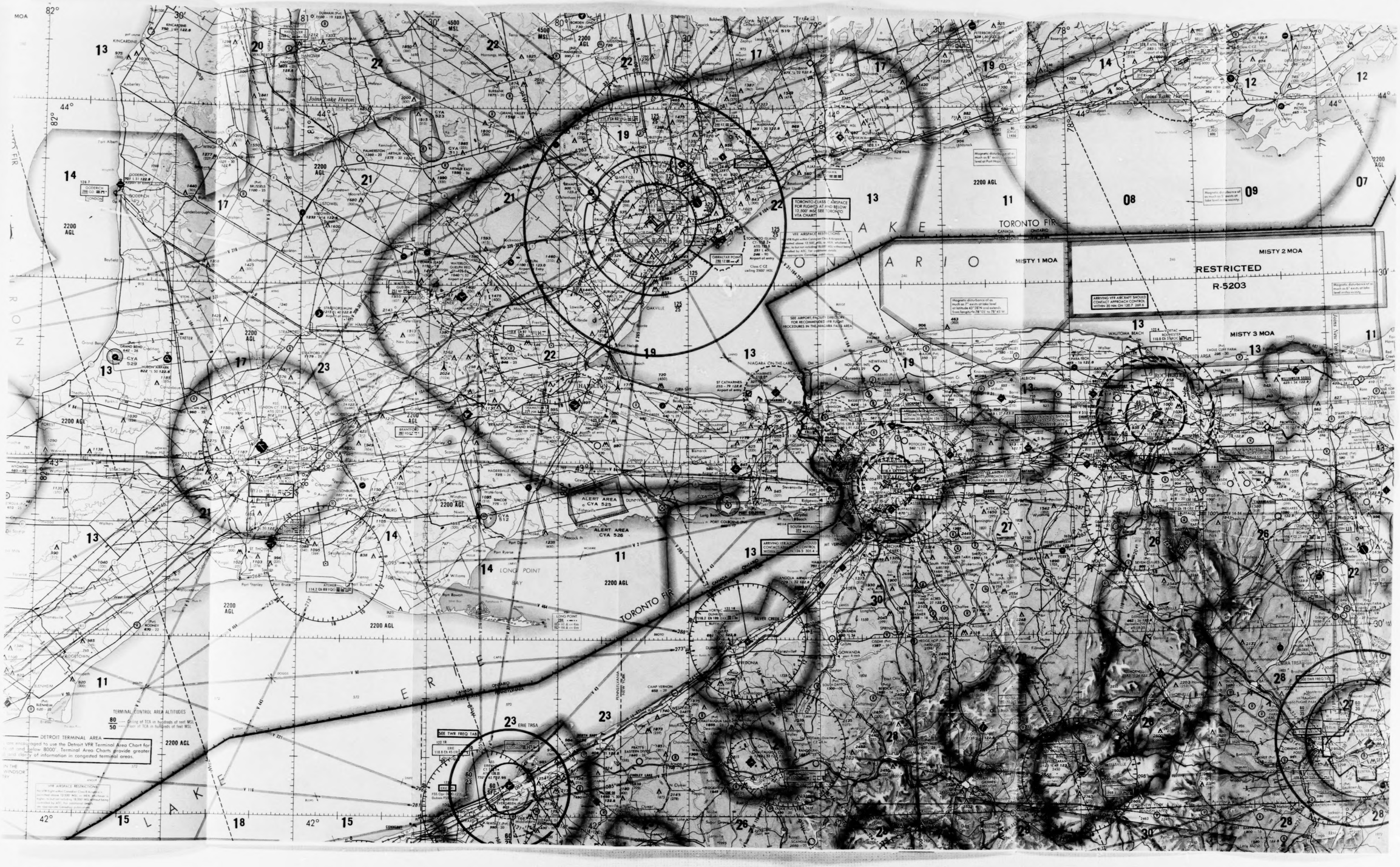

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PLOTTING DIRECT ROUTE ON NORTH/SOUTH SIDE

There are approximately two minutes of latitude overlap between the north and south sides of each sectional VFR chart. To plot a course line from one side to the other, the user must first draw two "match lines" that are common to both sides. On the north side connect the tick marks of the most southern minute of latitude and on the south side connect the marks of the most northern minutes of latitude. These "match lines" must have the same latitude on both the north and south sides.

Step No. 1
On the side of the chart having a terminal point nearer the match line, place a sheet of paper so that the edge of the paper is parallel to the match line while another edge intersects Terminal Point 1. Make a mark on the edge of the paper at Terminal Point 1 (Mark "A" as illustrated) and also another mark on the chart extending from match line to the edge of the chart (Mark "B" as illustrated).

Step No. 2
Roll the chart over and transfer Mark "B" from the north side to the south side, extending the mark to the match line. Align the sheet of paper to the match line with Mark "B" over Mark "B" on the south side and mark the corner of the sheet as the point where Terminal Point 2 is to be located. Draw a line from Terminal Point 2 to Mark "A" to intersect the match line forming Point "C".

Step No. 3
Turn chart over and transfer Point "C" from the south side to the north side. This can be done by measuring the distance from Mark "B" to Point "C" along the match line from the south side. With a straight edge draw a line from Point "C" to Terminal Point 1. This line is the direct course of the direct route drawn on the south side.

CONTROL TOWER FREQUENCIES ON DETROIT SECTIONAL CHART

Airports which have control towers are indicated on this chart by the letters CT followed by the primary VHF local control frequency. Unless otherwise noted, operation is continuous. Some towers are restricted to the operating hours, the low or medium broadcasting frequency is listed first followed by L VHF local control frequency, and the primary VHF and UHF military frequencies. Other frequencies may be assigned to the ground controller. Part-time towers have their hours of operation indicated to the collocated full-time FSS for use in Airport Advisory Service (AAS) during hours tower is closed. Hours shown are local time. Radio call provided if different from tower name.

Automatic Terminal Information Service (ATIS) frequencies, shown on the face of the chart are normal arriving frequencies, all ATIS frequencies available on HIGH/LOW/ILS plates.

ASR and/or PAR indicates Radar Instrument Approach available.

CONTROL TOWER	RADIO CALL	OPERATES	ATIS	FREQ	ASR/PAR
ANTWERP CO				123.3	
AUBURN CO		CONTINUOUS	120.55	121.3 239.8	
BEAVER CO				120.3	
BEAVER CO HP		(1000 - 1900 OCT-MAY) (0900 - 1700 JUN-SEP)		120.3	
BISHOP INTL	FLINT	0545-2330	124.95	126.3 257.8	ASR
BLISS AIRPARK		(0700-2300 FRI-SUN) (0700-2300 SAT)	127.85	122.9 257.8	ASR
BUCHANAN				114.8 316.9	
CAPITAL CITY	LANSING	CONTINUOUS	119.35	118.7 340.9	ASR
CHARLEVOIX MUNI		CONTINUOUS	127.85	123.9 257.8	ASR
CHEBOYGAN CO	CHEBOY	0700-2300		118.3	
CLARE CO		CONTINUOUS	120.75	122.1 257.8	
DETROIT METRO	METRO	CONTINUOUS	124.55	118.4 257.8 (ASST) 119.0 257.8 (ARR)	ASR
DOWAGIAC MUNI				123.0 257.8	
EMMET COUNTY REG	EMMET	1000-2200 (MON-FRI) 1000-2100 (SAT SUN)	119.85	118.1 257.8	ASR
GRAYLING AAF		0800-2400	135.35	120.5 251.8	ASR
GREATER BUFFALO INTL	BUFFALO	CONTINUOUS	127.25	118.7 338.3	ASR
GRATIOT-SAGINAW INTL	SAGINAW	CONTINUOUS	469 127.25	126.1 256.4	ASR
GRAYLING AAF		CONTINUOUS	135	123.3 254.3	ASR
GRAYLING MCCHESNEY MEM		CONTINUOUS	135	125.0 119.7 305.475	
HANCOCK CO-HOUGHTON CO	HANCOCK	0700-2200	120.35	120.7 257.8	
HARBOR SPRINGS		0900-2300	123.8	122.4 256.5	
HOUGHTON LAKE		0900-2400		120.7	
HOUGHTON-HANCOCK		CONTINUOUS	119.1	118.4 323.8	ASR
HOWELL-LIVINGSTON CO		0900-2400	120.65	118.3 340.0	
HOLLAND-ROPHAY	HOLLAND	0900-2400	120.65	122.9	
IRON MOUNTAIN-KINGSFORD		0700-2300	123.8	118.9 338.3	
IRONWOOD		0900-2400	124.9	120.1 257.8	
ISHPEMING		0900-2400	124.9	120.1 257.8	
JACKSON COUNTY-REYNOLDS		0700-2300	120.1	118.3 340.7	ASR/PAR
KALAMAZOO		CONTINUOUS	118.75 271.3	118.1 372.0	ASR
KINCHELOE AFB	TORONTO	0700-2300	118.7	118.7 338.6	
LAKE			124.9	123.1	
LANSING	LANSING	0630-2330	128.4	118.2 336.5	
LEELANAU CO	ISLAND	0900-2300	123.8	122.9	PAR
LEXINGTON CO		CONTINUOUS	118.45 257.7	128.7 256.5	ASR
MACKINAC ISLAND		0900-2300	118	122.7 257.8	ASR
MANISTEE CO-BLACK RIVER	MANISTEE	0900-2300	118.65	123.1	
MARQUETTE CO		0700-2300 (NOV-FEB) 0700-2400 (MAR-OCT)	118.075	118.1 257.8	
MT PLEASANT		0630-2230		118.1 257.8	
MUSKEGON		CONTINUOUS	127.65	118.7 257.8	ASR
NILES-BERRIEN CO				122.8	
OSCODA-WURTSMITH		CONTINUOUS	118	118.1 257.8	ASR
PELLSTON				123.0	
PONTIAC		CONTINUOUS	119.15	120.1 253.0	ASR

TCA, ARSA, TRSA, AND SELECTED RADAR APPROACH CONTROL FREQUENCIES

ANN ARBOR APP CON	124.3 340.2 (E) 128.3 (W)
ANN ARBOR TWR	124.3 (E) ANN ARBOR 2000 MSL (EAST)
BATTLE CREEK APP CON	118.35 307.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BATTLE CREEK TWR	118.35 307.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BAY CITY APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BAY CITY TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BENTON HARBOR APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BENTON HARBOR TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BUFFALO APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
BUFFALO TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
COLUMBUS APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
COLUMBUS TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
DAYTON APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
DAYTON TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
ROCHESTER APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
ROCHESTER TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
TOLEDO APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
TOLEDO TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
YOUNGSTOWN APP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
YOUNGSTOWN TWR	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)
ZANESVILLE APP/DEP CON	118.4 257.8 (W) 124.3 (E) ANN ARBOR 2000 MSL (EAST)

ATTENTION
THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF).
The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known elevation, cultural significance, including terrain and obstructions there, to the nearest 100 foot.

Example: 1,500 feet 15

REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, AND U.S. FOREST SERVICE AREAS

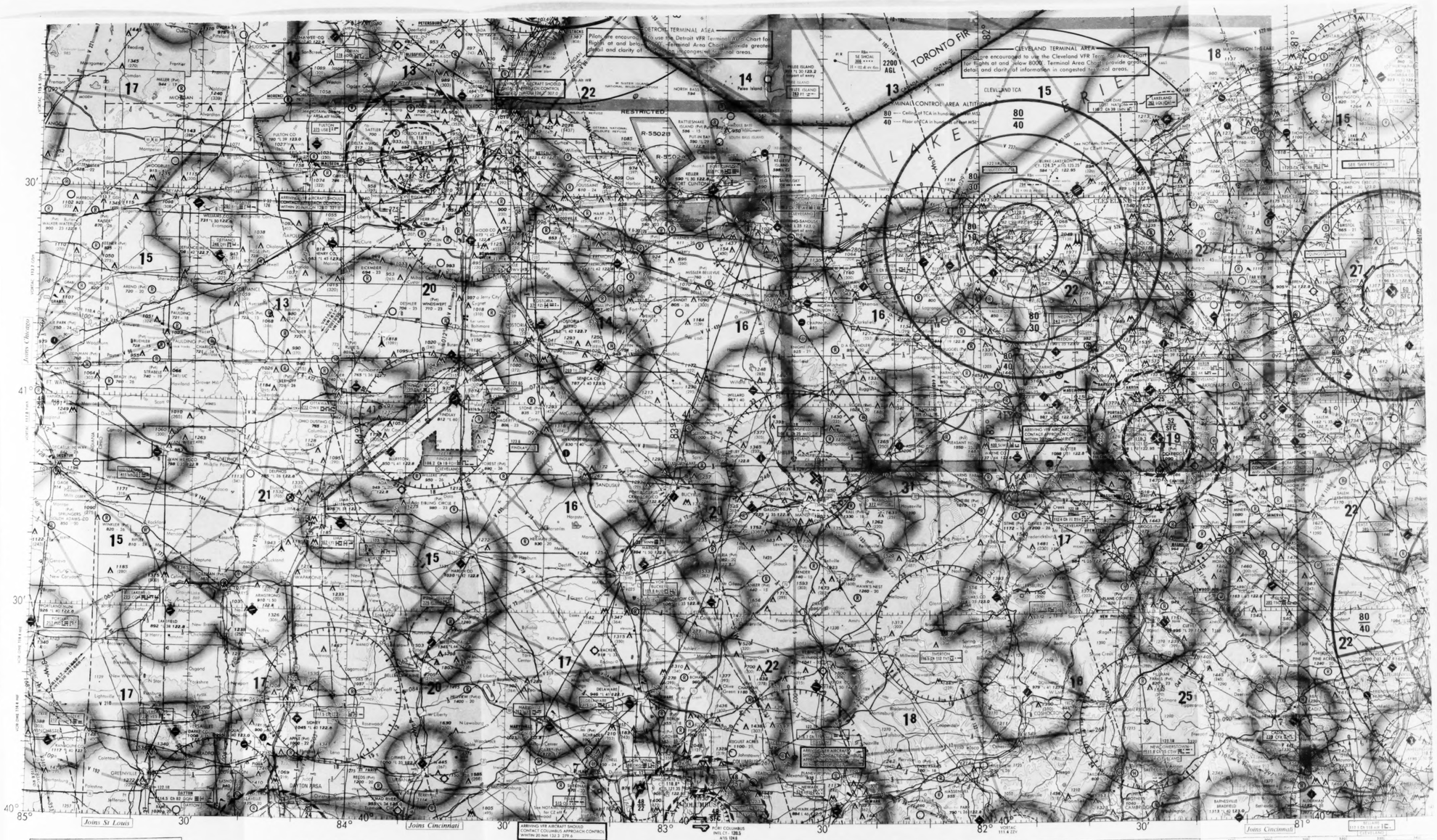
The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service or U.S. Forest Service without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government.

All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following National Parks, Monuments, Seashores, Lakeshores, Recreation Areas and Scenic Riverways administered by the National Park Service; National Wildlife Refuges, Big Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service; and Wilderness and Primitive areas administered by the U.S. Forest Service. FAA Advisory Circular AC) 91-36C, "Visual Flight Rules (VFR) Flight Near Noise Sensitive Areas," defines the surface as the highest terrain within 2,000 feet laterally of the route of flight or the upper most rim of a canyon or valley.

Federal regulations also prohibit airdrops by parachute or other means of persons, cargo or objects from aircraft on lands administered by the three agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life or 2) threat of serious property loss.

Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas, and U.S. Forest Service Wilderness and Primitive areas.

DETROIT


DETROIT TERMINAL AREA
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CLEVELAND TERMINAL AREA
Pilots are encouraged to use the Cleveland VFR Terminal Area Chart for flights at and below 8000. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.
TORONTO FIR
LAKE ERIE
RESTRICTED
R-5502B
R-5502C
CLEVELAND TCA
80/40
Joins St Louis
Joins Cincinnati
Joins Cincinnati
30'
41°
40°
85°
84°
83°
82°
81°

CAUTION: This chart is primarily designed for VFR navigational purposes and does not purport to indicate the presence of all telephone, telegraph and power transmission lines, terrain or obstacles which may be encountered below reasonable over route altitudes.

KILOMETERS 50 0 50 100 150 200 250 300 350
NAUTICAL MILES 50 0 50 100 150
STATUTE MILES 50 0 50 100 150 200

Entire area of this chart is within the Eastern Standard Time Zone. 5 hrs. behind GMT (+5 GMT)

SPECIAL USE AIRSPACE ON DETROIT SECTIONAL CHART

Unless otherwise noted altitudes are MSL (sea or land, here to face).
Contact nearest FSS for information.
NOTAM - Issued by NOTAM, contact FSS.

The word "TFR" on altitude means "To and including."
FL - Flight Level
NO A/G - We air to ground communications.

U. S. P-PROHIBITED, R-RESTRICTED, A-ALERT, W-WARNING, MOA-MILITARY OPERATIONS AREA

NUMBER	LOCATION	ALTITUDE	TIME OF USE	CONTROLLING AGENCY
P 5501	COLUMBUS, OH	TO FL 500	BY NOTAM 24 HRS IN ADVANCE	ZOB CNTR
P 5503	ROMULUS, MI	TO 2000	MON-FRI 0730-1600	NO A/G
P 5503A	LAKEVIEW, OH	TO 5000	APR 1-NOV 30 1000-1400 LMAS 31 0800-1700 148 HRS IN ADVANCE	ZOB CNTR
P 5503B	LAKEVIEW, OH	TO 17,000	TUE THUR 0800-1700 148 HRS IN ADVANCE	ZOB CNTR
P 5801	CHAMBERSBURG, PA	TO 4000	MON-FRI 0800-1600	NO A/G
P 5801	CHAMBERSBURG, PA	TO 4000	MON-FRI 0800-1600	NO A/G

CANADA P-PROHIBITED, R-RESTRICTED, A-ALERT, D-DANGER

CYA 560	CFB BORDEN, ONT	TO 2500	CONTINUOUS
CYA 502	LONDON, ONT	TO 4000	CONTINUOUS DAYLIGHT
CYA 511	KAMASCOS, ONT	TO 13,500	DCLS DAYLIGHT BY NOTAM
CYA 512	SARCOE, ONT	TO 2500 OCCASIONALLY HIGHER BY NOTAM	DAYLIGHT WED, SAT, SUN & HOLIDAYS
CYA 513	PORT COLBORNE, ONT	TO 13,500	DCLS DAYLIGHT BY NOTAM
CYA 519	BEAVERTON, ONT	TO 4000	CONTINUOUS DAYLIGHT
CYA 520	PORT PERRY, ONT	TO 4000	CONTINUOUS DAYLIGHT
CYA 522	MOUNT FOREST, ONT	TO 4000	CONTINUOUS DAYLIGHT
CYA 523	CAYUGA, ONT	TO 4000	CONTINUOUS DAYLIGHT
CYA 526	SEAFAL, ONT	TO 5000	CONTINUOUS DAYLIGHT
CYA 529	GRAND BEND, ONT	TO 13,500	DCLS DAYLIGHT BY NOTAM

MOA, ALERT, AND CAUTION AREAS

MOA NAME	ALTITUDE OF USE:	TIME OF USE*	CONTROLLING AGENCY
DUKE	8000	SUN-SAT 1000-1300	ZOB CNTR
MISTY 1	4000 AGL TO BUT NOT INCL 18,000	MON-FRI 0800-1200 SAT SUN 0800-1600	ZOB CNTR
MISTY 2	3AGL TO BUT NOT INCL 18,000	MON-FRI 0800-1200 SAT SUN 0700-1600	ZOB CNTR
MISTY 3	11,000 AGL TO BUT NOT INCL 18,000	MON-FRI 0800-1200 SAT SUN 0800-1600	ZOB CNTR
PETE	4000 4000 AND 5000 MSL ONLY WHEN USED FOR AIR REFUELING TRAINING IS NECESSARY, ALL OTHER TIMES THE FLOOR WILL BE 6000	CONTINUOUS	ZOB AND DAP CNTRS
RALPH	TO BUT NOT INCL FL 180	DAILY 0800-1700	DAP CNTR

*Altitudes indicate floor of MOA. All MOA's extend to but do not include FL 180 unless otherwise indicated in tabulation or on chart.

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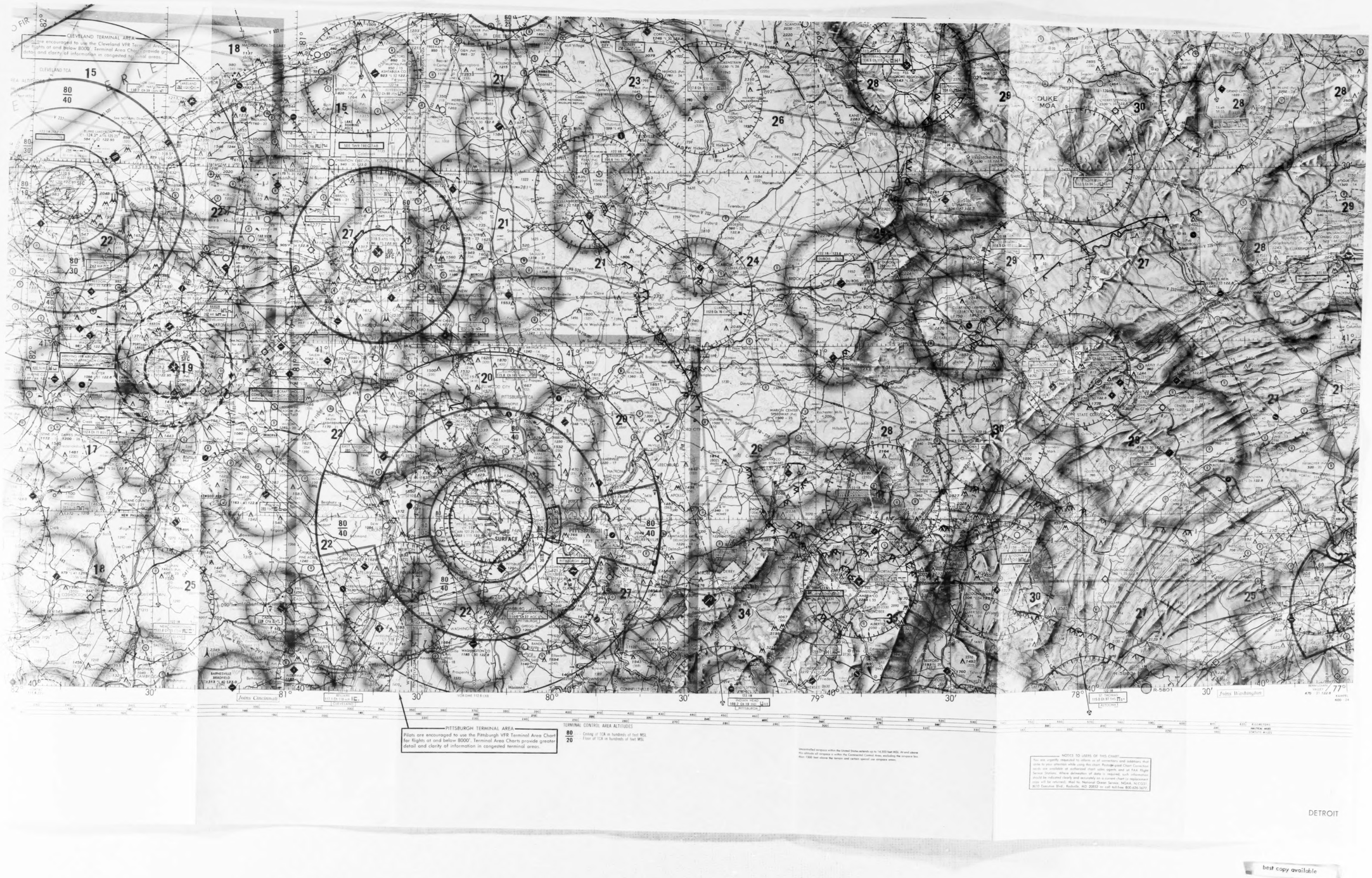
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TERMINAL CONTROL AREA ALTITUDES
80 Ceiling of TCA in hundreds of feet MSL
20 Floor of TCA in hundreds of feet MSL
Joins Cincinnati
Joins Washington
DUKE MOA
NOTICE TO USERS OF THIS CHART
DETROIT

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